STATEMENT OF L. NICHOLAS LACEY, DIRECTOR OF FLIGHT STANDARDS SERVICE, FEDERAL AVIATION ADMINISTRATION, BEFORE THE SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION, SUBCOMMITTEE ON AVIATION, ON A POTENTIAL PILOT SHORTAGE. JULY 25, 2000.

Mr. Chairman and Members of the Subcommittee:

I would like to thank you for the opportunity to appear before you today to discuss the impact of pilot shortages on air service in certain markets. I am a former military pilot and airline executive. As a component of today's discussion, the Subcommittee requested that I address the Federal Aviation Administration's ("FAA") age-60 requirement for retirement of air transportation pilots as well as the FAA's proposed rule on pilot flight time and rest requirements.

The FAA's primary mission is ensuring the safety of the National Airspace System (NAS). We work hard to manage a growth oriented aviation system--and the constraints on the system that growth imposes--in the most efficient and safe way possible. Our ongoing efforts to modernize the air traffic control system will enhance both the safety and efficiency of the NAS. The FAA also establishes, through our regulations, basic safety standards for aircraft and crewmembers that will ensure the safety of our traveling public. We construct our regulations very carefully, taking into account as many factors as we can, but ultimately, always making the decision that will best enhance aviation safety.

In my 24-year career with Air Force transport operations, pilot recruitment and retention was a constant and significant challenge, so I can relate to the concerns of those who

believe that a pilot shortage is imminent, one that could have an adverse impact on small and regional air carriers through high turnover rates. While there may be good reasons to be concerned about future pilot hiring shortages, I would like to reassure the Members of the Subcommittee and the public that we do not anticipate any significant reduction in air service in the United States.

The growth in commercial aviation reflects the continued economic expansion in both the U.S. and most world economies. The U.S. commercial aviation industry ended the 1990s by recording its sixth consecutive year of traffic growth, while the general aviation industry continued its turnaround by recording yet another record year in terms of aircraft billings. Using a number of variables to measure growth trends, the FAA publishes an annual summary of forecasts of aviation activity. Our latest forecasts, published in March of this year, show commercial system revenue passenger miles increasing an average of 4.6 percent a year through 2011. Enplanements are expected to increase at a yearly rate of 3.9 percent, while commercial operations at airports with air traffic control service increase 2.7 percent over the 12-year forecast period. Non-commercial activity is forecast to increase an average 1.6 percent annually. To accommodate this growth, the large air carrier fleet is forecast to increase 3.3 percent a year; the regional fleet is predicted to expand at a yearly rate of 3.0 percent.

Will the industry have qualified pilots in sufficient numbers to accommodate this growth, and to accommodate growth in every sector? My colleagues from the industry here today are certainly in a better position to provide a perspective on how the market will respond. However, based on our discussions with industry experts, we understand that, while the major airlines are not having difficulty meeting their pilot hiring goals, there are signs

that the regional airlines and those feeding the regionals are starting to see higher turnover and pilot applicants with declining prior experience. This is not surprising given the fact that the major air carriers can offer significantly better pay and benefits.

However, reducing safety standards or carving out exceptions to established safety standards, in my view, are not appropriate responses.

A little background information about what is required by FAA regulations to become a commercial pilot may be helpful to the discussion. The FAA's job is to set and enforce pilot qualification and training standards that will ensure public safety. I should note that the commercial aviation industry has an excellent safety record, due in large part to the knowledge, skills and abilities of its pilot workforce. To qualify to be a pilot for an airline, a person usually transitions from student pilot (not allowed to carry passengers), to private pilot (allowed to carry passengers, but not for hire), acquires an instrument rating (allowed to fly in minimum weather conditions), upgrades to a multi-engine rating (allowed to fly aircraft with two or more engines) to a commercial pilot certificate (allowed to fly passengers for hire). A person who acquires a commercial pilot certificate must have logged at least 250 hours of flight time. FAA regulations leading to a commercial certificate, as well as flight time acquired by flight instructing, do not require experience in a crew environment.

The airline transport pilot certificate (ATP) allows a person to act as pilot-in-command of an aircraft in part 121 air carrier operations, which include most commercial passenger and cargo flights for both major and regional airlines. The ATP requires a minimum aeronautical experience of 1,500 hours of flight time as a pilot and a minimum age of 23

years. Under current requirements, part 121 air carriers may not use a pilot who has reached his or her 60<sup>th</sup> birthday to act as a pilot in part 121 operations.

At the end of 1999, the number of active (meaning those with valid medical certificates) airline transport pilots totaled 137,642. We forecast the number of airline transport pilots to grow at an annual rate of 3.1 percent to a total of 198,100 in 2011. It is difficult to determine whether this potential rate of growth will ultimately lead to a significant shortage of pilots. At present, many individuals with airline transport pilot certificates are not employed by regularly scheduled airlines. Some work as general aviation flight instructors while others are not employed as pilots. An airline transport pilot certificate is required for a pilot-in-command for part 121 operations, but a pilot may act as a co-pilot or first officer with only a commercial pilot certificate in many part 121 operations. Airlines could look to persons with commercial pilot certificates (numbering 124,261 at the end of 1999 and projected to increase to 147,300 in 2011) as potential hires. Air carrier equipage, labor agreements, routes and future changes in these factors further complicate the analysis.

In addition, military downsizing will ultimately reduce the importance of ex-military pilots as a source for civilian airlines. From World War II through the mid-90s, approximately 80 percent of major airline new hires were military trained. This is down to approximately 40 to 45 percent today. According to data from AIR, Inc.'s 1997-1998 pilot interview, civilian pilots make up 61 percent of all pilots hired. Non-military sources for pilots are persons with commercial pilot certificates, general aviation pilots, and the more than 200 colleges and universities that offer aviation programs.

The regional air carrier industry is both the entry level for airline transport rated pilots, and an increasingly important source of experienced new pilots for the major commercial jet operators. We recognize that this is a source of concern for small and rural communities, where some speculate that airline service will suffer as pilots are hired away by larger airlines, offering better pay and benefits. The most important thing for the regional airline industry and small carriers, such as commuters and on demand operators, is that there is a continuous pool of new pilots to draw upon for training and development. Regional airlines are increasingly developing "bridge programs" with aviation universities that screen and refer graduates who meet the participating airlines' minimum standards for employment. Also, many of the regional airlines are dropping their "pay for training" programs, which had required their pilot applicants to pay for their training, and reducing their company's minimum qualifications for new hires.

The general aviation industry has taken steps to increase interest in aviation. To help sustain the pool of pilots, the "BE A PILOT" program was initiated in 1996 with a goal of 100,000 new student starts by the year 2000. This program is jointly sponsored and supported by more than 100 general aviation organizations. The program started issuing "introductory flight certificates" to interested respondents in May 1997. The certificates can be redeemed for a first flight lesson for a cost of \$35. To date, over 75,000 certificates have been requested. The program has over 1,600 participating flight schools.

Through our regional offices, the FAA in partnership with state transportation officials, offer information and outreach to local communities about careers in aviation. We maintain an Aviation Education Web site at <a href="https://www.faa.gov/education">www.faa.gov/education</a> where the public

may find a host of career and curriculum materials, industry and educational contact listings, and community outreach initiatives.

Certainly, it is appropriate for the aviation industry to develop measures to increase its pilot hiring pool. However, we do not believe that part of the solution is to alter FAA safety standards, namely the FAA's age-60 rule, as some have suggested. The age-60 rule represents the FAA's best determination of the time when a general decline in health-related functions and overall cognitive and performance capabilities may begin and reach a level where a pilot's judgement and physical ability may begin to decline and therefore jeopardize safety. Our rule means that a pilot who reaches age 60 must leave part 121 operations, but it does not mean that he or she can no longer play an important a role in aviation. Many pilots continue to work for part 121 airlines in the screening, recruitment and training of pilot applicants, or fly in non-part 121 operations, or become flight instructors, or, fortunately for us, work as safety inspectors for the FAA.

Since its adoption in 1959, the FAA has reviewed the age-60 rule several times to determine whether new and sufficient evidence exists to warrant a reconsideration of the regulation. The last completed review included a two-day public meeting, held during September 1993. FAA, assisted by an independent research company, Hilton Systems, reviewed over 4,000 comments, which made assertions and expressed opinions but did not provide the FAA with additional facts or analyses sufficient to support changing the rule. More recently, the Senate Appropriations Committee last year requested the FAA to study and provide data regarding relative accident rates based on pilot age. We are conducting that data review now.

I must emphasize that before making any change to a safety rule, the FAA must be satisfied that the regulation will maintain or raise the current level of safety. What is clear to us from reviewing public comments and relevant literature concerning the age-60 rule is that there is no "right answer." The question for the FAA is one of public safety and determining acceptable risk. At this time, the FAA cannot be assured that changing the age-60 rule will maintain or raise the level of safety.

Finally, some have argued that the FAA's proposed changes to the rules governing pilot flight time and rest requirements, published in a 1995 Notice of Proposed Rulemaking (NPRM), may have an adverse affect on the hiring pool for pilots. The NPRM generated voluminous public comment and required further study and analysis, and is currently being revised by the FAA. We believe that the NPRM will not decrease the number of qualified pilots. The proposed rule, however, would establish the maximum number of hours that a pilot can be kept on duty each day. It would also require that a pilot be provided minimum rest period in every 24 hours. Admittedly, the net effect of these proposed changes may be an increase in the number of pilots required to support today's airline schedules.

The FAA estimated that the NPRM would, if implemented, impose increased labor costs on the airline industry, but would also result in some cost savings as well. The airline industry disagreed with those estimates and commented that cost would be much higher and any cost savings would be only a fraction of what the FAA estimated. The principal difference between the FAA and industry estimates is associated with the issue of how many pilots would be needed under the NPRM. We are taking into account these and all

other comments associated with the proposal, as well as the latest science available on human fatigue and rest, in developing our revised rule.

Mr. Chairman, the FAA will develop regulations in the context of what is best for public safety, whether that is setting standards to combat pilot fatigue or determining the best age for retirement of commercial pilots. While economic factors are certainly a part of that calculation, I am sure the Committee and our colleagues in industry would agree that safety must be the priority.

That concludes my prepared remarks. I would be happy to answer any questions the Committee may have.